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5. Write each expression as a quotient of powers.

a) $(8 \div 5)^3$ **b)** $(21 \div 5)^4$ **c)** $[(-12) \div (-7)]^5$

d) $\left(\frac{10}{3}\right)^3$ **e)** $\left(\frac{1}{3}\right)^2$ **f)** $\left(\frac{27}{100}\right)^4$

8. Write each expression as a product or quotient of powers.

a) $[3 \times (-5)]^3$ **b)** $-(2 \times 4)^5$

c) $\left(\frac{2}{3}\right)^4$ **d)** $\left(\frac{-7}{-2}\right)^2$

e) $-[(-10) \times 3]^3$ **f)** $(16 \div 9)^2$

10. Simplify each expression, then evaluate it. For each expression, state the strategy you used and why.

a) $(3 \times 2)^3$ **b)** $[(-2) \times 4]^2$ **c)** $\left(\frac{9}{-3}\right)^3$

d) $\left(\frac{8}{2}\right)^2$ **e)** $(12^8)^0$ **f)** $[(-4)^2]^2$

Do: b, d, f, g on Question 14

14. Simplify, then evaluate. Show your work.

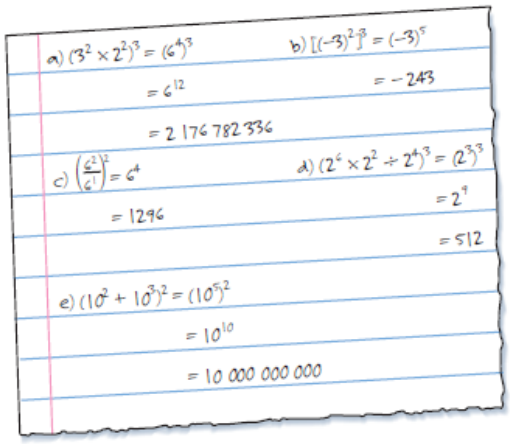
a) $(3^2 \times 3^1)^2$ **b)** $(4^6 \div 4^4)^2$

c) $[(-2)^0 \times (-2)^3]^2$ **d)** $(10^6 \div 10^4)^3$

e) $(10^3)^2 \times (10^2)^3$ **f)** $(12^2)^4 \div (12^3)^2$

g) $(5^2)^6 \div (5^3)^4$ **h)** $[(-2)^2]^3 \times (-2)^3$

15. Find any errors in this student's work. Copy the solution and correct the errors.



16. Simplify, then evaluate each expression.

a) $(4^2 \times 4^3)^2 - (5^4 \div 5^2)^2$

b) $(3^3 \div 3^2)^3 + (8^4 \times 8^3)^0$

c) $(2^3)^4 + (2^4 \div 2^3)^2$

d) $(6^2 \times 6^0)^3 + (2^6 \div 2^4)^3$

e) $(5^3 \times 5^3)^0 - (4^2)^2$

f) $(10^5 \div 10^2)^2 + (3^3 \div 3^1)^4$

Do: a, f on Question 19

19. Simplify, then evaluate each expression.

a) $(2^3 \times 2^6)^2 - (3^7 \div 3^5)^4$

b) $(6 \times 8)^5 + (5^3)^2$

c) $[(-4)^3 \times (-4)^2]^2 + (4^3 \times 4^2)^2$

d) $[(-2)^4]^3 + [(-4)^3]^2 - [(-3)^2]^4$

e) $[(-3)^4]^2 \times [(-4)^0]^2 - [(-3)^3]^0$

f) $[(-5) \times (-4)]^3 + [(-6)^3]^2 - [(-3)^9 \div (-3)^8]^5$